



## Research Article

# GARRET'S RANKING OF CONSTRAINTS PERTAINING TO REGULATED MARKETS IN SAURASHTRA

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**Abstract:** Ranking second in the world farm output, the agricultural sector is the backbone of Indian economy contributing majorly to the country's Gross Domestic Product (GDP). It also indicated that the government was keen on doubling farmers' income by 2022, for which it has launched several new initiatives that encompass activities from providing quality seed to marketing of agricultural output. Creation and development of a network of regulated markets across the county has been the most important strategy of the Government of India since independence to ensure remunerative price to farmers and reasonable price for consumers by creating conducive market environment for fair play of demand and supply forces. Over a period of time, many of the APMCs lost momentum despite the best intentions and efforts of the government. Therefore, the study was conducted in Saurashtra region to study the constraints pertaining to regulated markets and responses were obtained from 5 commission agents/traders and 10 farmers from each of ten selected markets. The Garret's ranking technique was used to analyze the constraints perceived by different beneficiaries of regulated markets. Non-remunerative price for farmers' produce and seasonality of arrivals and labour shortage were main constraints faced by farmers and traders respectively.

**Keywords:** Regulated markets, Constraints, Garret's ranking, Farmers, Traders

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## Introduction

The agricultural situation in India has undergone a rapid change from last two decades. Agricultural production, in general has achieved reasonable growth rate. But the growth rate has not only to be maintained, but accelerated. The efforts are already under way through evolving location specific technologies. On one side, farmers are affected by prices of agricultural inputs and output, and on the other side, consumers also expect the reasonable prices. For achieving this conflicting objective, marketing system for agricultural commodities has to play a very crucial role. Marketing is as critical to better performance of agriculture as farming itself. Therefore, market reforms and marketing system improvement ought to be an integral part of policy and strategy for agricultural development [1]. Creation and development of a network of regulated markets across the county has been the most important strategy of the Government of India since independence to ensure remunerative price to farmers and reasonable price for consumers by creating conducive market environment for fair play of demand and supply forces. It was quoted by Mani *et al.*, in 2015, that in the country there were approximately 27 Regulated Market Acts including different states and Union Territories except in the states like the states of Jammu and Kashmir, Kerala, Maldives and other small Union Territories like Dadra & Nagar Haveli, Lakshadweep, *etc.* The Acts differ from state to state in terms of coverage of commodities, constitution and role of market committees and marketing boards [2]. The rationale of state regulation of agricultural markets was to protect farmers from the exploitation of intermediaries and traders. It also aimed to ensure better prices and timely payment for their produce. After some years, these markets have though acquired the status of restrictive and monopolistic markets, providing no help in direct and free marketing, organized retailing and smooth raw material supplies to agro industries.

## Objectives of The Study

To identify the constraints faced by farmers and traders related to regulated markets

## Methodology of The Study

### Selection of Sample

The data for the study were collected from primary sources. Multi-stage sampling procedure was followed in selecting the sample of farmers and traders/commission agents. Saurashtra region of Gujarat state was selected purposively as it is one of the major pocket areas of groundnut crop. Among the regulated markets of Saurashtra region, top ten markets were selected considering the average market arrivals of groundnut for three years, i.e. from 2015 to 2017. From the ten selected regulated markets, 5 commission agents/traders and 10 farmers from each market were selected randomly for the study. Therefore, the total sample size for the collection of primary data was 150 samples.

### Garret's ranking technique

The Garret's ranking technique was used to analyze the constraints perceived by different beneficiaries of regulated markets of Gujarat state. The respondents in the study were farmers and traders/commission agents from selected regulated markets. The constraints faced by them were identified. To identify the constraints of regulated markets, a questionnaire was designed through pre-tested schedule covering the important aspects of regulated markets.

Through this method, constraints can be arranged into order of their numerical scores. The constraints are arranged through Garret's ranking technique based on their relevance and priority from the point of view of respondents and this advantage differentiates this method from just simple frequency distribution method of ranking.

Garrett's formula for converting ranks into per cent is given by,

Per cent position =  $100 * (R_{ij} - 0.5) / N_j$

Where,

$R_{ij}$  = Rank given for  $i^{th}$  factor (constraint) by  $j^{th}$  individual

$N_j$  = Number of factors (constraints) ranked by  $j^{th}$  individual

Table-1 Constraints faced by the farmers in regulated markets

SN	Particulars	Total score	Garret's score	Rank
1	Not well-equipped market yard	3388	33.88	12
2	Distance from farm	3852	38.52	10
3	High commission charges	2222	22.22	14
4	Poor weighing system	2668	26.68	13
5	Poor grading system	3434	34.34	11
6	Inadequate information regarding facilities/amenities at regulated market	5719	57.19	6
7	Lack of information and facilities for e-NAM	6499	64.99	3
8	High cost of transportation	6232	62.32	5
9	Non-remunerative price for farmer's produce	7054	70.54	1
10	Inadequate storage facilities	5243	52.43	7
11	Lack of knowledge about grading and packaging	6923	69.23	2
12	Wastage during loading & unloading and transfers	6374	63.74	4
13	Lack of credit facilities	51.04	51.04	8
14	Total time gap between operations	4688	46.88	9

Table-2 Constraints faced by the market intermediaries in regulated markets

SN	Particulars	Total score	Garret's score	Rank
1	Inadequate transportation facilities	1343	26.86	12
2	Immediate cash payment of sale proceeds to farmers	1486	29.72	10
3	Heavy competition among traders	1410	28.2	11
4	Inadequate/poor infrastructural and storage facilities (damaged internal roads)	2220	44.4	8
5	Poor waste disposal and cleaning system	2439	48.78	7
6	High overhead costs (Shop rent, electricity, labour, etc.)	2447	48.94	6
7	Labour shortage	3486	69.72	2
8	Seasonality of arrivals	3675	73.5	1
9	Risk of fire, theft, etc.	1967	39.34	9
10	Official formalities (Licensing, fees, etc.)	3383	67.66	3
11	Lack of uniform procedures in marketing	3059	61.18	4
12	Quality constraints ( adulteration, poor quality)	2664	53.28	5

The relative position of each rank obtained from above formula will converted into scores by referring to the table given by Garrett (transmutation of orders of merit into units of amount or scores) for each factor scores of all individuals will be added and then divided by the total number of respondents for the specific factor (constraint) attributes [3].

### Analysis and Interpretation

#### Constraints faced by farmers

The constraints faced by farmers in regulated markets are given in [Table-1]. A perusal of table clearly revealed that non-remunerative price for farmer's produce was the major and common constraint with a mean score of 70.54. Majority farmers are small and medium farmers in India and agricultural products are seasonal. Therefore, it creates a glut situation in the market during season of respective commodities. It results into low prices of agricultural produces. Hence, non-remunerative price of agricultural produce was the major constraint reported by the farmers in all the markets.

Farmers brought the commodities directly to the market as such in gunny or plastic bags and stated as unaware regarding grading and packaging. The second major constraint was lack of knowledge about grading and packaging with mean score of 69.23, followed by lack of information and facilities for e-NAM (64.99), wastages during loading and unloading (63.74), high cost of transportation (62.32), inadequate information regarding facilities/amenities at regulated market (57.19), inadequate storage facilities (52.43), lack of credit facilities (51.04), total time gap between operations (46.88), distance from farm (38.52), poor grading system (34.34), not well equipped market yard (33.88) and poor weighing system (26.68).

Though all the selected markets are covered under e-NAM, farmers lack information and facilities to use e-NAM and it was marked as the third major constraint. During auction, for the purpose of sampling and during loading and unloading, wastages occur, which results into loss to farmers. Farmers also responded that they sale their commodities at nearest market and in far and other district's market also to get better prices. Hence, transportation cost was an issue. They also lack any type of credit facilities or assistance from the market.

In this scenario, when agricultural marketing and agricultural produce markets are

given due weightage to bring reforms, farmers reported that they were unaware regarding facilities and amenities provided by regulated markets. Inadequate storage facilities, especially in case of bulk supply, total time gap in marketing operations, distance from farm, poor grading and weighing system, high commission charges were other constraints identified by farmers of the selected regulated markets.

It can be observed from the given table that major constraints were related to price and lack of information pertaining to marketing of produce. According to [4], in Gujarat, all most all cotton and groundnut farmers cited lack of packing material, high transportation cost, lack of storage and credit facilities in market yard as the major problems faced in marketing of their produce. [5] also quoted inadequate storage, irregular electricity and inadequate transport facility as the major problems faced by farmers.

#### Constraints faced by traders

The constraints faced by market intermediaries in selected regulated markets are given in [Table-2]. A perusal of table clearly revealed that seasonality of arrivals and labour shortage were two main constraints with a mean score of 73.50 and 69.72, respectively. The respondents further cited the constraints of official formalities such as licensing (67.66), lack of uniform procedures in marketing (61.18), quality constraint due to adulteration (53.28), high overhead cost for rent, electricity, labour charges etc. (48.94), poor waste disposal system (48.78), inadequate storage facilities (44.4), risk of fire, theft etc. (39.34), immediate cash payment of sale proceeds to farmers (29.72), heavy competition among traders (28.20) and inadequate transportation facilities (26.86).

From the given table it is revealed that, the seasonality is due to nature of agricultural product which is beyond the control and therefore difficult to overcome. Labour shortage was also the second major constraint which results into high labour charges indicates the scope for mechanization of marketing operations. Due to lack of cold storage and inadequate storage facilities, purchase and preserve in bulk or large quantity was limited hence, marked as constraint. Adulteration by farmers in commodities namely sesame, groundnut, cotton etc. were cited as constraint by market intermediaries. Problems of waste disposal and cleaning were reported specially in Junagadh, Bhavnagar and Mahuva market.

Even though surrounded by CCTV cameras, risk of theft was cited by the traders of Bhavnagar, Kalavad and Mahuva markets. Immediate cash payment for sales, transportation and competition among traders were ranked as secondary constraints by traders.

### Conclusion

The results of Garrett's ranking analysis of constraints faced by farmers related to regulated markets revealed that non-remunerative price for farmer's produce was the major and common constraint, followed by lack of knowledge about grading and packaging, lack of information and facilities for e-NAM, wastages during loading and unloading, high cost of transportation, inadequate information regarding facilities/amenities at regulated market, inadequate storage facilities, lack of credit facilities, total time gap between operations, distance from farm, poor grading system, not well equipped market yard and poor weighing system as revealed in the study. The results of Garrett's ranking analysis of constraints faced by market intermediaries in regulated markets revealed that seasonality of arrivals and labour shortage were two main constraints, followed by official formalities such as licensing, lack of uniform procedures in marketing, quality constraint due to adulteration, high overhead cost for rent, electricity, labour charges *etc.*, poor waste disposal system, inadequate storage facilities, risk of fire, theft *etc.*, immediate cash payment of sale proceeds to farmers, inadequate transportation facilities and heavy competition among traders.

### Suggestions

A special awareness program should be conducted by GSAMB in all regulated markets to introduce the farmers about all types of the facilities available in the markets and the duties and responsibilities of the market committees in their area. Provisions should be made for technical guidance to farmers regarding cleaning, grading and packaging at the premises of regulated markets. Farmers should be educated to avoid any adulteration in the commodities, as it results them in loss of price or buyers.

**Application of research:** The study will expose the various constraints faced by the farmers and traders in regulated markets

**Research Category:** Agricultural marketing

Abbreviations: GSAMB - Gujarat State Agricultural Marketing Board,  
e-NAM - electronic National Agricultural Market

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